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(71) Applicant (for all designated States except US): **QINETIQ LIMITED [GB/GB]**; Registered Office, 85 Buckingham Gate, London SW1E 6PD (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SPENCE, Geoffrey**

[GB/GB]; QinetiQ Limited, Malvern Technology Centre, E building Room 510, St Andrews Road, Malvern, Worcs. WR14 3PS (GB). **CLARKE, Ira, James [GB/GB]**; Little Cleveland Farm, Little Cleveland, Malvern, Worcs WR13 6PE (GB).

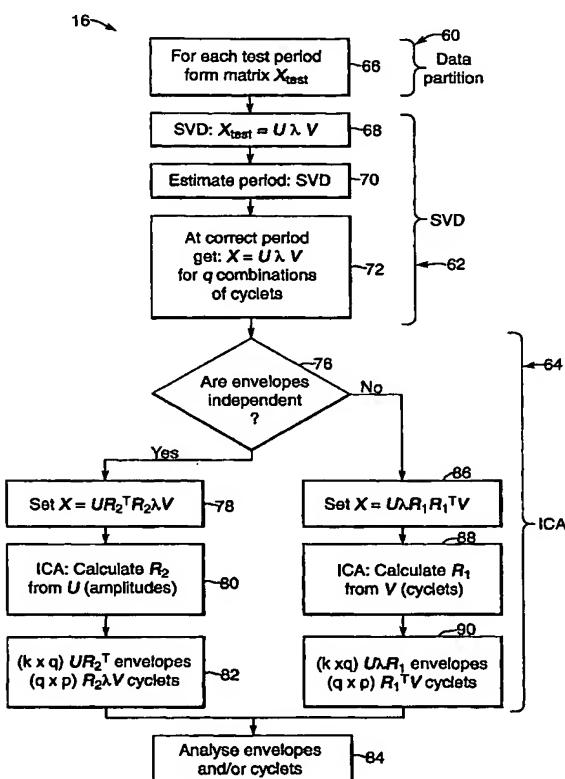
(74) Agent: **WILLIAMS, A., W., S.; IP Qinetiq Fromalities, Cody Technology Park, A4 Building, Room G016, Ively Road, Farnborough, Hampshire GU14 0LX (GB).**

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(54) Title: SIGNAL SEPARATION



(57) Abstract: A signal separation method (16) for separation of source signals from a composite signal (104) expresses the composite signal (104) as a series of values of signal amplitude. The source signals have periodicities similar or equal to p . The composite signal (104) is partitioned into sections which provide respective rows of a matrix X , in which successive rows represent successive sections. A singular value decomposition of the matrix X is performed to obtain two singular vector matrices U, V and a singular value matrix λ . An independent component analysis is performed on one of the singular vector matrices U, V to obtain an independent component matrix $UR_2^T, R_1^T V$ and an associated component matrix $R_2\lambda V, U\lambda R_1$. One of the component matrices $UR_2^T, U\lambda R_1$ contains estimated separated signal modulation envelopes and the other component matrix $R_2\lambda V, R_1^T V$ contains estimated separated cyclets.

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